ELSEVIER

**Author Index to Volumes 125–130**


Ali, S. W., and C. Cosner, 127:45
Allen, Linda J. S., 127:123

Bahrampour, Abbas, *See* Becker, Niels G.
Bassanezi, R. C., *See* Costa, M. I. S.
Becker, Niels G., Abbas Bahrampour, and Klaus Dietz, 129:189
and Klaus Dietz, 127:207
*See also* Rouderfer, Vladimir
Bélair, Jacques, Michael C. Mackay, and Joseph M. Mahaffy, 128:317
Bell, Jonathan, *See* Slavík, Petr
Bernard, Olivier, and Jean-Luc Gouzé, 127:19
Bishir, John, and James Roberds, 125:109
Blythe, Stephen, Stavros Busenberg, and Carlos Castillo-Chavez, 128:265
Boldrini, J. L., *See* Costa, M. I. S.
Bos, Cees, Louis Hoofd, and Thom Oostendorp, 125:165
Brauer, Fred, 128:13
Brenner, David J., *See* Chen, Pei Li
Busenberg, Stavros, Kenneth Cooke, and Ying-Hen Hsieh, 128:185
*See also* Blythe, Stephen
Byrne, H. M., and M. A. J. Chaplain, 130:151

Carroll, Joseph E., Roland H. Lamberson, and Stephen Roe, 129:169
Cascante, Marta, Raul Curto, and Albert Sorribas, 130:51
*See also* Curto, Raul, and Sorribas, Albert
Castillo-Chavez, Carlos, Kenneth Cooke, and Horst Thieme, 128:3
and Wenzhang Huang, 128:299
*See also* Blythe, Stephen, *and* Hadeler, K. P.
Cavalieri, Liebe F., and Huseyin Kocak, 127:1
Chaplain, M. A. J., *See* Byrne, H. M.
Chappell, Michael J., 125:61
Chauvet, G. A., 126:41
Chen, Pei Li, David J. Brenner, and Rainer K. Sachs, 126:147
Cooke, Kenneth, *See* Busenberg, Stavros, *and* Castillo-Chavez, Carlos
Cosner, C., *See* Ali, S. W.
Costa, M. I. S., J. L. Boldrini, and R. C. Bassanezi, 125:191, 211
Curto, Raul, Albert Sorribas, and Marta Cascante, 130:25
*See also* Cascante, Marta, *and* Sorribas, Albert

Dietz, Klaus, *See* Becker, Niels G., *and* Sattenspiel, Lisa
Distefano, Joseph J., III, *See* Feng, Dagan
Dobson, A. P., *See* Roberts, M. G.
Doi, Shinji, and Shunsuke Sato, 125:229
Driessche, P. van den, *See* Liu, Wei-Min
Dushoff, Johnathan, and Simon Levin, 128:25

Eichner, M., and K. P. Hadeler, 127:149
Evans, J. D., G. Major, and G. C. Kember, 125:1

Fan, Jian, *See* Kiltie, Richard A.
Feng, Dagan, and Joseph J. Distefano III, 129:67
Feng, Zhilan, and Horst R. Thieme, 128:93
Fitzgibbon, W. E., M. E. Parrott, and G. F. Webb, 128:131

Gao, Linda Q., Jaime Mena-Lorca, and Herbert W. Hethcote, 128:157
Goldstein, Byron, *See* Posner, Richard G.
Gouzé, Jean-Luc, *See* Bernard, Olivier
Griffiths, R. C., and Simon Tavaré, 127:77



*MATHEMATICAL BIOSCIENCES* 130:207–209 (1995)


© Elsevier Science Inc., 1995


655 Avenue of the Americas, New York, NY 10010

0025-5564/95/$9.50
SSDI 0025-5564(95)00131-X

Gueron, Shay, and Simon Levin, 128:243

Hadeler, K. P., and C. Castillo-Chavez, 128:41
*See also* Eichner, M.
Hastings, Alan, 128:285
Hethcote, Herbert, W., *See* Gao, Linda Q.
Higashi, Masahiko, and Hisao Nakajima, 130:99
*See also* Nakajima, Hisao
Hoofd, Louis, 129:1, 25
*See also* Bos, Cees
Hsieh, Ying-Hen, *See* Busenberg, Stavros
Huang, Lihong, Moxun Tang, and Jianshe Yu, 130:85
Huang, Wenzhang, *See* Castillo-Chavez, Carlos

Jacquez, John A., 128:1
Jean, Roger, 127:181
Johnston, Peter R., and David Kilpatrick, 126:125

Karayiannis, Nicholaos B., and Anastasios N. Venetsanopoulos, 129:143
Kault, D. A., 128:211
Kember, G. C., *See* Evans, J. D.
Kiffe, Thomas R., *See* Matis, James H.
Kilpatrick, David, *See* Johnston, Peter R.
Kiltie, Richard A., Jian Fan, and Andrew F. Laine, 126:21
Kocak, Huseyin, *See* Cavalieri, Liebe F.
Krishna Kumar, B., *See* Parthasarathy, P. R.

Laine, Andrew F., *See* Kiltie, Richard A.
Lamberson, Roland H., *See* Carroll, Joseph E.
Lee, Sho Rong, *See* Tan, Wai-Yuan
Lenas, Petros, and Stavros Pavlou, 129:111
Levin, Simon, *See* Dushoff, Johnathan, and Gueron, Shay
Li, Michael Y., and James S. Muldowney, 125:155
Liu, Wei-Min, and P. van den Driessche, 128:57

Mackay, Michael C., *See* Bélair, Jacques
Mahaffy, Joseph M., *See* Bélair, Jacques
Major, G., *See* Evans, J. D.
Mao, Jian-Hua, and Tom E. Wheldon, 129:95
Marshall, David, *See* Martelli, Mario
Martelli, Mario, and David Marshall, 128:347
Matis, James H., Qi Zheng, and Thomas R. Kiffe, 126:215
Mena-Lorca, Jaime, *See* Gao, Linda Q.
Muldowney, James S., *See* Li, Michael Y.

Nakajima, Hisao, and Masahiko Higashi, 130:129
*See also* Higashi, Masahiko
Nelson, George W., and Alan S. Perelson, 125:127
Norwich, Kenneth H., and Willy Wong, 125:83

Oostendorp, Thom, *See* Bos, Cees

Parrott, M. E., *See* Fitzgibbon, W. E.
Parthasarathy, P. R., and B. Krishna Kumar, 125:51
Pavlou, Stavros, *See* Lenas, Petros
Perelson, Alan S., *See* Nelson, George W.
Posner, Richard G., Carla Wofsy, and Byron Goldstein, 126:171

Rachev, Svetlozar, T., Chufang Wu, and Andrej Yu. Yakovlev, 127:127
Roberds, James, *See* Bishir, John
Roberts, M. G., and A. P. Dobson, 126:191
Roe, Stephen, *See* Carroll, Joseph E.
Rouderfer, Vladimir, and Niels G. Becker, 129:41

Sachs, Rainer K., *See* Chen, Pei Li
Sato, Shunsuke, *See* Doi, Shinji
Sattenspiel, Lisa, and Klaus Dietz, 128:71
Slavík, Petr, and Jonathan Bell, 130:1
Sorribas, Albert, Raul Curto, and Marta Cascante, 130:71
*See also* Cascante, Marta, and Curto, Raul
Svensson, Åke, 127:167

Takeda, Kyozaburo, 130:183
Tan, Wai-Yuan, Sho Rong Lee, and Si Chin Tang, 126:81
Tang, Moxun, *See* Huang, Lihong
Tang, Si Chin, *See* Tan, Wai-Yuan
Tavaré, Simon, *See* Griffiths, R. C.

Thieme, Horst R., *See* Feng, Zhilan, *and* Castillo-Chavez, Carlos

Venetsanopoulos, Anastasios N., *See* Karayiannis, Nicolaos B.

Webb, G. F., *See* Fitzgibbon, W. E.
Wheldon, Tom E., *See* Mao, Jian-Hua
Wofsy, Carla, *See* Posner, Richard G.
Wong, Willy, *See* Norwich, Kenneth H.
Wu, Chufang, *See* Rachev, Svetlozar T.

Yakovlev, Andrej Yu., *See* Rachev, Svetlozar, T.
Yakowitz, S., 127:99
Yakuba, Abdul-Aziz, 126:1
Yu, Jianshe, *See* Huang, Lihong

Zheng, Qi, 130:203
*See also* Matis, James H.

ELSEVIER

**Subject Index to Volumes 125–130**


AIDS, the impact of sexual mixing patterns on, 128:211
modeling defective interfering virus (DIV) therapy for, 125:127
AIDS modeling, computational methods for Markov series with large state spaces, with application to, 127:99
Associative motor learning by the cerebellar cortex: from Purkinje unit to network with variational learning rules, 126:41

Biological control of insect pests, a potential problem in, 127:1
Biological loop models with application to the Droop model, transient behavior of, 127:19
Biological populations, describing the spread of, using stochastic compartmental models with births, 126:215
Bivalent ligand-bivalent receptor aggregation, kinetics of: ring formation and breakdown of equivalent site approximation, 126:171
BOOK REVIEW: Allen, Linda J. S., Modelling Biological Problems in Space and Time (Eric Renshaw), 127:133
Busenberg, Stavros, remembering, 128:3

Cerebellar cortex, associative learning by, 126:41
Chain rule approach to ecological interaction networks, 130:99
Chaos, a potential problem in the biological control of insect pests, 127:1
Chemotherapy, optimal, drug kinetics and drug resistance in, 125:191
Childhood diseases, recurrent outbreaks revisited: the impact of isolation, 128:93
Clonally propagated plant populations, analysis of failure time in, 125:109
Compartmental analysis result, 130:203
Competition between species in heterogeneous environments, models for the effects of individual size and spatial scale on, 127:45
Competitive systems, discrete, effects of planting and harvesting on endangered species in, 126:1

Defective interfering virus (DIV) therapy for AIDS, modeling, 125:127
Disease invasion, effects of population heterogeneity on, 128:25
Disease transmission, a core group model for, 128:41
DIV survival, conditions for, 125:127
DNA, coherent potential approximation approach to electronic structure of, 130:183
Droop model, transient behavior of biological loop models with application to, 127:19
Drug kinetics and drug resistance in optimal chemotherapy, 125:191

Ecological interaction networks, indirect effects in. I. The chain rule approach, 130:99
II. The conjugate variable approach, 130:129
Electrocardiology, the inverse problem of, 126:125
Endangered species in discrete competitive systems, effects of planting and harvesting on, 126:1
Epidemic in a closed multigroup population, on the simultaneous distribution of size and costs of, 127:167



*MATHEMATICAL BIOSCIENCES* 130:211–213


© Elsevier Science Inc., 1995


655 Avenue of the Americas, New York, NY 10010

0025-5564/95/$9.50
SSDI 0025-5564(95)00132-8

Epidemic model, a structured, incorporating geographic mobility among regions, 128:71
Epidemic models, diffusion, with incubation and crisscross dynamics, 128:131
Epidemics in different community settings, threshold parameters in, 129:189
Epidemiological models with varying population size and dose-dependent latent period, 128:57
Erythrocytes as point-like sources, mathematical model, 125:165
Erythropoeisis, age-structured and two-delay models for, 128:317
Evolutionary ecology, a wavelet-based metric for visual texture discrimination with applications in, 126:21

Global bifurcation structure of the BVP neuronal model driven by periodic pulse trains, 125:229
Global stability for the SEIR model in epidemiology, 125:155
Group formation, the dynamics of, 128:243

HIV in Asia, a model for, 128:185
HIV infection and seroconversion characterization of, by a stochastic model of the HIV epidemic, 126:81

Infectious diseases, highly, effect of household distribution on transmission and control of, 127:207
Inversion techniques, performance of, as a function of patient anatomy, 126:125
Ionizing radiation damage to cells: effects of cell cycle redistribution, 126:147

Learning, associative motor, by the cerebellar cortex: from Purkinje unit to network with variational learning rules, 126:41
Logistic equation revisited: the two-sex case, 128:299

Mammillary models, cascaded, an algorithm for identifiable parameters and parameter bounds for a class of, 129:67
Markov series with large state spaces, computational methods for, with application to AIDS modeling, 127:99
Mechanoreceptor model for rapidly and slowly adapting afferents subjected to periodic vibratory stimuli, 130:1
Metapopulation model with population jumps of varying sizes, 128:285
Microbial populations, coexistence of three competing, in a chemostat with periodically varying dilution rate, 129:111

Neural networks, high-order, on the training and performance of, 129:143
Neuronal model, BVP, driven by periodic pulse trains, global bfurcation structure of, 125:229
Neurones, passive, multicylinder somatic shunt cable model for, analytical solution, 125:1
Nonlinear efflux from two-compartment model, 125:61

Oxygen pressures in tissue with anisotropic capillary orientation, calculation of. I. Two-dimensional analytical solution for arbitrary capillary characteristics, 129:1
II. Coupling of two-dimensional planes, 129:25

Paired event probability, affinity in, 128:265
Parasitic helminths, the population dynamics of communities of, 126:191
Phyllotaxis: the status of the field, 127:181
Poliomyelitis, deterministic models for the eradication of, 127:149
Polio virus vaccine, vaccination with activated (IPV) and inactivated (OPV), 127:149
Population dynamics, of communities of parasitic helminths, 126:191
nonlinear, models for diseases with vertical transmission and, 128:13
Population heterogeneity, effects on disease invasion, 128:25
Predator-prey systems, qualitative analysis of Kolmogorov-type models of, 130:85
Prendville growth mechanisms, stochastic compartmental models with, 125:51

*Saccharomyces cerevisiae*, comparative characterization of the fermentation pathway of, using biochemical systems

theory and metabolic control analysis: model definition and nomenclature, 130:25
model validation and dynamic behavior, 130:71
steady-state analysis, 130:51
SEI endemic models, four, with periodicity and separatrices, 128:157
SEIR model, global stability for, 125:155
Sensory receptor action, single-unit, a universal model of, 125:83
Sexual mixing patterns, impact on spread of AIDS, 128:211
Sinks, sources, and spotted owls: a territorial population model, 129:169
Somatic shunt cable model for passive neurones, multicylinder, analytical solution, 125:1
Stability and attractivity in discrete dynamical systems, 128:347
Stochastic compartmental models, with births, used to describe the spread of biological populations, 126:215
with Prendville growth mechanisms, 125:51
Stochastic model of the HIV epidemic, characterization of HIV infection and seroconversion by, 126:81

Territorial population model with continuous mortality and discrete birth, 129:169
Toxicity, chemotherapeutic treatments involving drug resistance and level of normal cells as a criterion of, 125:211
Tumorigenesis, multistage, in developing and adult mice, stochastic model for, 129:95
Tumor latency time, a bivariate limiting distribution of, 127:127
Tumors, nonnecrotic, growth in the presence and absence of tumors, 130:151
Two-compartment models incorporating nonlinear efflux from the peripheral compartment, structural identifiability and indistinguishability of, 125:61

Unrooted genealogical tree probabilities in the infinitely-many-sites model, 127:77

Vaccination schedules, two-dose, assessment of: availability for vaccination and catch-up strategies, 129:41
Vertical transmission and nonlinear population dynamics, models for diseases with, 128:13
Vibratory stimuli, periodic, mechanoreceptor model for rapidly and slowly adapting afferents subjected to, 130:1

Wavelet-based metric for visual texture discrimination with applications in evolutionary ecology, 126:21